ience Library

OCT 2 0 1945

ROCKS and MINERALS

Official Journal of the Rocks and Minerals Association

A Magazine for Mineralogists, Geologists and Collectors

OCTOBER, 1945

25c

Vol. 20, No. 10

Whole No. 171

"STREAMLINER" Diamond Saws

You don't buy a **Pig in a Poke** when you get one. **"Streamliners"** were used by the hundreds during the War, in America's largest industries and government use. Not a singe "Streamliner" is on the market with the government stamp, marked **(REJECT)**. Saws from high speed 4" diameters for cutting sound detectors to large slow speed 24" diameters for sawing huge Brazilian Quartz crystals were used. "Streamliners" carry an unconditional guarantee, and not one single saw with the Mark. V + X has ever been returned. It's our claim — The finest Saw ever made, or ever will be made! "Streamliners" need no breaking in, are true and straight. They won't wear one side off the set. 12" saws are guaranteed to cut 3000 Sq. Inches of assorted materials. Our customers tell the story. Mr. W. T. Baxter, famous author of **Jewelry, Gem Cutting and Metalcraft,** says—"What you claim for your saws is true. They sure go through Agate."

James W. Riley, Springfield, Ohio, advertiser in these pages, says—"We don't have to buy saws so often now. We cut at least 1000 Sq. inches more with your saws than any others we have used." **G. P. Entner, Importer and cutter of 908 Jackson Street, Oregon City, Oregon**—says, "Received the four 20" diameter saws. You say they are better. We always found your saws tops. We put one to work. It has already sawed 800 Sq. Inches and shows no wear at all. We are going to keep a record of the mileage."

Art's Gem Shop, 218 N. 3rd Street, Gallup, N. M., wires—"Send four more 12" diameters. We cut 5000 Sq. Inches with one of the last 12" diameters."

A. L. Sparks, Lusk, Wyoming, says—"What you claim for saws is right. We tried one out and it sure does the work."

Prices are 6" — **$5.50,** 8" — **$6.50,** 10" — **$7.50,** 12" — **$8.50,** 14" — **$11.00.** State arbor hole size. Postage **25 cents.**

WILFRED C. EYLES

The Enchanted Publo

BAYFIELD COLORADO

ROCKS and MINERALS

PUBLISHED MONTHLY

Edited and Published by PETER ZODAC

October 1945

CONTENTS FOR OCTOBER, 1945

CHIPS FROM THE QUARRY 462

NOTES ON SOME MINERAL LOCALITIES IN RHODE ISLAND. *By Willard Stone Winslow, Jr.* 463

SAPPHIRE OCCURRENCE IN INDO-CHINA 467

BLEYBERG, BELGIUM 467

MINERAL LOCALITIES OF MONROE, N. Y., AND BEAR MOUNTAIN PARK. *By V. L. Ayres* 468

JASPERS IN SOUTHERN NEW JERSEY. *By Peter Zodac* 470

RED GARNETS BY THE TON. *By T. Orchard Lisle* 471

ARANDISITE IN SO. AFRICA — WULFENITE IN ALASKA 471

BLEIBERG, AUSTRIA 472

CHOATE CHROME MINE. *By Peter Zodac* 473

THE "GEM BASKET OF THE WORLD." *By John A. Quinn* 474

PERU'S GREATEST LEAD MINE 474

MAMMOTH REMAINS COMMON IN SIBERIA 475

MINERAL COLLECTING IN FRANCONIA, N. H. *By Samuel C. Brown* 475

PIONEER SAPPHIRES. *By Annie Keeler Williams* 476

BIXBYITE NAMED FOR MINERAL DEALER 476

MOLYBDENITE AT NEWPORT, N. H. 477

CHILEAN RIVER BED YIELDS GRATUITOUS COAL SUPPLY 477

A COLLECTOR IN CHINA (LETTER FROM T/SGT. IVAN H. MERCER) 478

NEW GEM LOCATION — PLENTY FOR EVERYBODY 478

MULTI-COLORED STONE FOR CUTTING AND POLISHING 478

CELESTITE FROM PENNSYLVANIA — ATTRACTIVE SPECIMEN FROM PENN. 479

BRENNER PASS OF AUSTRIA 479

COBAR COPPER MINES OF AUSTRALIA — AGATES AT DENVER, MO. 479

BERT TABOR (Obituary Notice). *By Donal Hurley* 480

AGATE OCCURRENCE IN IOWA — BARITE IN PENN. — ONYX IN ARIZ. 480

"ME AND PA." TWO OLD ROCKHOUNDS. 481

FIRST OIL WELL DRILLED IN PENNSYLVANIA 481

AMBER OCCURRENCES IN ALASKA 481

AMATEUR LAPIDARY. (HOME-MADE LAP UNIT). *By W. T. Baxter* 482

ANTHRACONITE NEAR NORWOOD, MICHIGAN. *By Carl E. Wulfman* 483

CLUB AND SOCIETY NOTES 484

WITH OUR DEALERS 486

INDEX TO ADVERTISERS 516

Entered as second-class matter September 13, 1926, at the Post Office at Peekskill, N. Y., under the Act of March 3, 1879

Copyright 1945 by Peter Zodac

Title registered in U. S. Patent Office

Specially written articles (as contributions) are desired.
Subscription price $2.00 a year; Current numbers, 25c a copy. No responsibility is assumed for subscriptions paid to agents and it is best to remit direct to the Publisher.
Issued on the 1st day of each month.

Authors alone are responsible for statements made and opinions expressed in their respective articles.

ROCKS and MINERALS PEEKSKILL, N. Y., U. S. A.

The official Journal of the Rocks and Minerals Association

CHIPS FROM THE QUARRY

Duplicate May Not Be Available!

During the past few weeks quite a number of requests have been received for back numbers of *Rocks and Minerals* for the present year. Some stated that they had given away one copy or another and so wanted to buy duplicates to replace them. In most cases the orders could not be filled.

The January, February, March, May, June and July, 1945, issues of *Rocks and Minerals* are exhausted and so no more copies can be supplied.

Do not give away any of your copies in the future until you first obtain a duplicate to replace it. Orders for back numbers are coming in so fast that many issues are exhausted and others almost so.

Do not ask for free copies to be sent to friends — it is all we can do to fill orders for members and subscribers.

Transvaalite Occurrence in South Africa

Transvaalite is an oxidation product of smaltite occurring in black nodular masses. It is found at an old cobalt mine, 50 miles due north of Middlebury, in central Transvaal, in South Africa.

The vein at the mine consists of much decomposed feldspar, green amphibole, smaltite (and its alteration products, erythrite and transvaalite) with minor amounts of chalcopyrite, epidote, molybdenite, quartz, and titanite.

Transvaalite, an impure hydrous cobalt oxide, received its name from Transvaal, the name of the province in which it was found.

Louis Reamer, Lecturer

Louis Reamer, popular Secretary of the Newark Mineralogical Society, and a member of the R. & M. A., has branched out as a lecturer, speciallizing in fluorescence. He has had a number of engagements, chiefly from men's clubs.

John A. Albanese A Civilian Again

John A. Albanese, of Newark, N. J., who entered the navy on September 12, 1942, when he enlisted in the Sea Bees, was discharged on July 26, 1945.

While in the navy he was stationed in New Caledonia, Russell Islands, Guadacanal, Hawaiian Islands, Saipan, Tinian, etc. A recent letter from him reads:

"As a mineralogist, my trips, totalling 47,000 miles, were a bust. A boy scout in his home town could have gathered more minerals than I did in all my travels."

Mr. Albanese, a member of the R. & M. A., and a former mineral dealer, did collect a number of minerals many of which he sent to the Editor of *Rocks and Minerals* and which proved very interesting.

Miss Lewis Arrives in Hollywood!

Mr. and Mrs. W Scott Lewis, of 2500 Beachwood Dr., Hollywood, Calif., are the proud parents of a baby girl who was born on September 21, 1945. The little lady weighed 7 lbs. 5½ ozs. at birth and her name is Marion Constance.

Mr. Lewis is a member of the R. & M. A. and is also one of our valued advertisers.

Four Extra Pages Added

This issue of *Rocks and Minerals* has four extra pages. We have been growing steadily during the past few years and we will continue to increase the number of pages of the magazine to keep pace with our advertising and subscriptions. And this increase is due to our many friends who are recommending *Rocks and Minerals* to their friends and acquaintances. Many ads and subscriptions have been received in this way and we are deeply grateful.

The September issue of *Rocks and Minerals* was mailed on September 11th. When did your copy arrive?

ROCKS and MINERALS

PUBLISHED MONTHLY

Edited and Published by PETER ZODAC

October 1945

Vol. 20, No. 10

The official Journal of the ROCKS and MINERALS ASSOCIATION

Whole No. 171

NOTES ON SOME MINERAL LOCALITIES IN RHODE ISLAND

By WILLARD STONE WINSLOW, JR.

Many readers of *Rocks and Minerals* may like to hear about localities for minerals in Rhode Island. From time to time very interesting articles have appeared in this magazine on R. I. minerals, which serves to record the progress made in collecting in that state. Several other worthwhile publications frequently contain interesting articles as well. At the end of these notes will appear a list of some of these articles as printed in recent years. This article will serve to introduce new locations to some readers and will also offer additional information on better known localities.

There are two famous limestone deposits in northern Rhode Island, once noted for their profusion of mineral specimens. They have, unfortunately, been famous also for the abundance of incorrect names having been applied to them. They are correctly known as the Harris Lime Quarries, Lime Rock (hamlet), Lincoln (township); and Dexter Lime Quarry, Lincoln township. The latter quarry is not usually ascribed to any village, although Lonsdale or Saylesville may be given. These villages are in Lincoln. Many specimens from these localities are today, still labeled, incorrectly, "Smithfield." This name would be correct prior to 1871, but in that year the section of Smithfield containing the limestone deposits formed the new township of Lincoln. The limestone peculiar to the localities is still known as "Smithfield limestone" in commerce.

Harris Quarries

The Harris Quarries (old books often used the terms beds or pits) consists of three workings, quite near each other. The first deposit now appears on the right side of the Louisquisset Pike (R. I. Route 146), (the main road between the cities of Providence and Woonsocket). Providence lies about eight miles to the south. The pit occurs as a ragged limestone wall rising above an attractive pond, made by flooding of the old pit. The first shelf of the quarry lies some 35 feet below the water level, the bottom much more. The quarry was first operated by Thomas Harris, a follower of Roger Williams, in the early part of the seventeenth century. A stone wall was built across the floor of one quarry to separate the interests of two owners, one owner was a descendant of the first operator. The other workings occur to the southeast, toward Pawtucket. Except for some local working, the pits have not been used in about fifty years, therefore not much good specimen material is now to be found. When in operation many specimens of great attractiveness and rarity were found, including crystals of dolomite, quartz, and calcite. These three were often unusual pieces. The dolomite was used as an illustration in many mineral books. Serpentine, and its unique variety bowenite, were common, especially at the quarry south of the dirt (Wilbur) road. Talc, asbestos and tremolite, as well as other amphiboles were common.

Dexter "Rock"

The next interesting limestone quarry is the Dexter "Rock", on the Dexter Rock Road, which runs eastward from the Great Road. This spot, southwest of Harris Quarry, is west of the Blackstone

River and east of the Lincoln Woods State Reservation. The pit of the quarry is about 800 feet long, 300 feet wide, and 120 feet deep. The kilns have been in use for the manufacture of lime for farming purposes and for plaster, since 1902; while the quarry has been worked from early in the seventeenth century up until the summer of 1943. The latest news has it that the lack of manpower has forced it to close. Water is rapidly filling the hole. The minerals found here are similar to those found at Harris, and old specimens are almost indistinguishable to local collectors, in the varieties of some calcites, dolomites and quartz types. Other specimens include octahedrite, nacrite (green globular micaceous mineral), graphite, azurite coloration, talc, and others. This locality has truly been one of Rhode Island's most popular collecting grounds through the centuries.

Cumberland Township Localities

Several localities in Cumberland township were visited in 1943, where Diamond Hill proved the most interesting. Here, specimens of botryoidal hematite were found south of the freshest workings on the southern slope of the hill. Copper Mine Hill, Iron Mine Hill, and Calumet Hill were visited, but produced nothing unusual. The latter locality is posted, as it contains a government rifle range. Manville, a village on the Cumberland-Lincoln border, was visited for its old talc mine, but this spot has been completely obliterated by the encroachment of homes. The talc once found here equalled that from Manton in Providence. The manganese locality was relocated by Prof. Quinn and specimens of melanterite, pyrites, actinolite, pyrolusite, rhodonite, and actinolite in quartz were secured. This spot is the origin of the famous "Thetis Hair stone" (actinolite crystals in quartz). This gem was formerly highly prized. The Calument Hill Granite Quarry produced hornblende crystals in quartz or "Venus Hair Stones". Some mineralogists reverse the colorful names in applying them to the two minerals.

Harrisville Amethyst

Traveling directly west, to the extreme opposite side of the state, in Burrillville, the hamlet of Harrisville was visited in obtaining small, loose crystals of amethystine quartz. Although not too hard to find in the soil, they do not appear very often in deep color, as true amethyst does. The deposit lies just east of the Chepachet-Harrisville Road.

Manton Quarry

On the western fringe of the city of Providence lies the village of Manton, (or Dyerville), a mill town which contains a large quarry from which "bluestone" was cut. The quarry, however, after its closing in 1941, is now filled with water of great depth, so the minerals of national fame which it formerly produced no longer may be obtained. Sphene crystals, pink calcite in cleavable pieces, and sea-green talc, not to mention many other minerals, have been sold to dealers and collectors in many parts of the world. Most of the specimens were obtained in a pocket opened about fifteen years ago. The author lives within a mile of the quarry, and has been able to collect many fine specimens, some from inside the sheds.

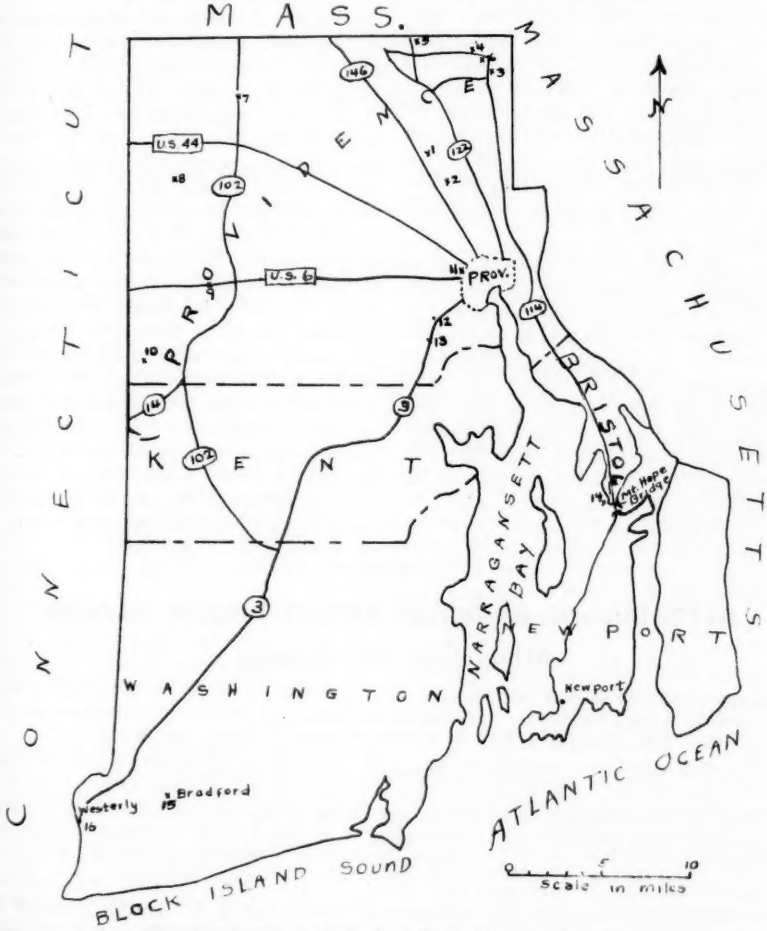
Cranston Localities

South of Providence, in Cranston (city), the Sockanosset Coal (graphite) Mine produced attractive specimens of fibrous quartz. (silicified asbestos fibers), asbestos, melanterite and marcasite. The fibrous quartz was pure white, resembling the color of sugar, and was common in veins near the mouth of one of the open pit workings. The mine lies on New London or Reservoir Avenue, R. I. (Route 2 and 3).

To the west at Oaklawn, a farming village in Cranston township, there is a prominent Indian steatite quarry. Numerous excavations have been made lately to produce the Indian artifacts that were made here years ago. The most interesting mineral specimens are to be had in the large pieces of actinolite, some being in a matrix of steatite. A large specimen was recently presented to the American Museum of Natural History, and will be placed in an exhibition case. The actinolite perhaps equals that from Chester, Vermont.

South Foster Localities

In Foster township about 20 miles west of Providence, on U. S. Route 6 or Hartford Pike, in the hamlet of South Foster or Hopkins Mills, there is a prominent outcrop of granite with a contact of other formations. This contains "platy ilmenite", chlorite crystals, kyanite in quartz, tourmaline, scapolite, sma'l apatite crystals of a white color, and actinolite. These minerals may be obtained on the south side of the road, except for the scapolite and apatite, which are found to the north side of the outcrop on the village road, at the white schoolhouse.



Map Showing Some Rhode Island Mineral Localities

1—*Harris Quarry*
2—*Dexter Quarry*
3—*Diamond Hill*
4—*Copper Mine Hill*
5—*Iron Mine Hill*
6—*Calumet Hill*
7—*Harrisville*
8—*Durfee Hill*
9—*South Foster*
10—*Moosup Valley* (*Ponagansett Gold mine*)
11—*Manton*
12—*Cranston*
13—*Oaklawn*
14—*Bristol Point*
15—*Bradford*
16—*Westerly*

Bristol Point Amethyst

Leaving Providence County, and going south, Bristol Point was visited, in Bristol township. The end of the town, where the beautiful Mount Hope suspension bridge connects the mainland with the township of Portsmouth, offers a locality for amethyst. At one time when Bristol was a port for sailing vessels the amethyst was very abundant and was secured for polishing as a gem, to be presented to loved ones, by the seafaring men. Today, however, only pale specimens may be obtained infrequently from the granite outcrops along the shore of Mt. Hope Bay. From nearby hills the cities of Newport, R. I., and Fall River, Mass., may be seen.

Westerly Granite Quarries

Westerly, a township on the southwest bordering Connecticut, is famous not only as a summer resort, but as a great granite center in the United States. The main industry was begin in 1846 by Mr. Orlando Smith who esablished the first quarry. Since that time scores of quarries have been operated and holes dot the countryside. From the trains on the N. Y., N. H. & H. R. R. may be seen several derricks in the distance. The New England Granite Co., a typical operation, conducted by the Smiths' lies only 15 minutes walk from the civic center. Here amid the blasted ledges one may obtain feldspar crystals of the "Carlsbad Twin" type, fluorite, garnets, and the more common minerals found in most granites. The granite is fine-grained, susceptible to carving for memorial purposes, as well as for building stone. The trade terms include the colors red, white, blue and pink. Most of the granites are of flesh-color. Among the minerals that have been found in Westerly, are amethyst, pyrites, ilmenite, magnetite, sphene, menaccanite, apatite, epidote, rutile, beryl, and garnet. Many of these minerals are found (but not frequently) in small deposits in dikes in the granite. The pureness of the granite bars the profusion of minerals in most cases. The Sullivan Quarry in Bradford, a village within the township, contains a prominent quarry covering an area of over 900 acres. The work, carried on in places 200 feet below the surface, is mostly done by electrical methods. The most famous piece of work done in Westerly granite was the "Antietam Soldier" for the battlefield of Antietam, Maryland. It was cut from a single block weighing sixty tons.

INTERESTING ARTICLES ABOUT RHODE ISLAND

Mineralogy and Geology

American Journal of Science

Vol. 160(10)	1900, Page 163	Geology of Narragansett Basin
Vol. 20	1880, Page 416	Carboniferous Rocks in Mass., and R. I. W. O. Crosby and Barton)
Vol. 27 (7)	1884, Page 217-28 282-91	Contribution to the Geology of R. I. (Nelson T. Dale)
Vol. 196(46)	1918, Page 437-72	Geology of Rhode Island (A. C. Hawkins)
Vol. 197(47)	1918, Page 308	Geology of Rhode Island (A. C. Hawkins)
Vol. 176(26)	1908, Page 469	Copper Mine Hill, Cumberland (C. H. Warren)
Vol. 22	1881, Page 152	Iron Ore of Iron Mine Hill, Cumberland Jas. Dana)
Vol. 179(29)	1910, Page 447	"Granites in Southwestern R. I." (G. F. Loughlin)
Vol. 175(25)	1908,	"Iron Mine Hill", Cumberland (Johnson & Warren)
Vol. 34	1887, Page 108	"Beacon Pole Hill's Crocidolite", (Chester & Cairns)
Vol. 146	1893, Page 363	"Geology of Conanicut Island (Jamestown)" (L. V. Pirsson)

American Mineralogist

Vol. 1	(January, 1916)	The Occurrence of Lamellar Calcite in R. I. A. C. Hawkins)
Vol. 3	(July, 1918)	Fibrous Quartz from R. I. (A. C. Hawkins)
Vol. 7	(February, 1922)	Crystallography of Three Minerals from R. I. (A. C. Hawkins)

Vol. 10 (November, 1925)	Veins with Fibrous Quartz and Chlorite from Vicinity of Providence (Gragg Richards)
Vol. 11 (December, 1926)	Notes on Mineral Localities in R. I. Part I Providence County (Fisher & Gedney)
Vol. 12 (December, 1927)	Notes on Mineral Localities in R. I. Part II Remaining Counties (Fisher & Gedney)
Vol. 22 (April, 1937)	Minerals and Associated Rocks at Copper Mine Hill (Quinn & Young)
Vlo. 28 (April, 1943)	Settling of Heavy Minerals in a Granodiorite Dike at Bradford, R. I. (A. W. Quinn)
Rocks and Minerals	
Vol. 12, No. 2 (February, 1937)	Some Old Quartz Localities in R. I. (A. L. Flagg)
Vol. 17, No. 2 (February, 1942)	Collecting In Rhode Island (W. S. Winslow, Jr.)
Vol. 20, No. 4 (April, 1945)	Seashore Minerals (J. R. Hyneman)
Also various issues under "New England Notes"	Rudolph B. Bartsch

Sapphire Occurrence in Indo-China

One of the most important gem localities in Indo-China is the Bo Pie Rin sapphire mine in the valley of Phailin in the southwestern part of the country (in western Cambodia province), near the Siamese frontier, about 50 miles S. W. of the city of Battambang. The deposit was first brought to the attention of the western world in 1890 by Burmese traders who, after passing through the country, reported to their countrymen that they had seen nice blue stones in the hands of natives who were ignorant of their value. Investigation disclosed that the gems were sapphires, and of high quality, and the deposit was exploited by the Burmese.

The sapphires are found as pebbles and rolled crystals in a light sandy clay which is from 2 to 10 feet deep and which rests on crystalline rock. Rubies, garnets, and other minerals occur with the sapphires; the mine consists of small shallow pits which likewise vary from 2 to 10 feet in depth as does the clay. The sapphires from the Bo Pie Rin mine are of a most beautiful blue color, some are of a very deep velvety blue, called "cornflower blue", the choicest shade.

The mines of Bo Pie Rin (native name for "Hills of Precious Stones") not only yield the finest sapphires known but they also produce about five-eights of the world's yearly output.

The gems from the mine are all sent to Chatabun, on the southern coast of Siam and center of the gem mining industry, from which city they are forwarded to Europe where they are cut and sold as Siamese sapphires.

In 1941, as a result of Japanese instigated war with Siam, Indo-China ceded 21,750 square miles of territory (mostly in Cambodia) to her, and the sapphire mines may now belong to Siam.

Bleyberg, Belgium

Bleyberg is a little mining town about 20 miles northeast of the city of Liege (in northern Liege province), in eastern Belgium. The mine at Bleyberg is one of the nation's great lead and zinc mines.

The ore body in the Bleyberg mine averages 3 feet in thickness, stands almost vertical, and extends for almost 5 miles cutting through Lower Carboniferous limestone and Coal Measure shales, sandstones, and grits.

The ore body consists chiefly of sphalerite and galena in about equal proportions and nice crystals of these two minerals are often found lining cavities in the vein and cavities are quite numerous and often large. Calamine, calcite, cerussite, hydrozincite, pyrite, smithsonite, etc. also occur in the mine and sometimes in nice specimens.

Bleyberg is in the famous Aachen lead-zinc district of western Germany which includes a number of great mines known for fine minerals. The most famous of the mines was the Vieille Montagne at Altenberg which is said to have become exhausted over 100 years ago (in 1844). Aachen is a German city on the Belgian frontier and was considerably damaged during the recent war.

MINERAL LOCALITIES OF MONROE, NEW YORK, AND BEAR MOUNTAIN PARK

By V. L. AYRES

Michigan College of Mining and Technology, Houghton, Michigan

Monroe, Orange County, New York, is listed in Dana's *System of Mineralogy* as furnishing a score of minerals; and many specimens so labeled are to be found in The American Museum of Natural History in New York City. However, the present-day collector starting out from the village of Monroe is very apt to return empty-handed, because many of the place names have been changed since the locality was first mentioned in Dana's early editions.

Monroe refers not to the village but to the old township, which long ago was subdivided into the present townships of Monroe, Tuxedo, and Woodbury. Monroe formerly included all the New York State portion of the present Bear Mountain and Harriman sections of the Palisades Interstate Park. Two Ponds, a sublocality mentioned by Dana, is now Twin Lakes, five or six miles east of the village; Greenwood Furnace is now Arden, four miles to the southeast; O'Neil mine, two and a half miles to the south, has been abandoned for a couple generations, and its dumps have been cleaned up for road material; Wilkes mine, one and a quarter miles to the southwest, is locally known as Clove. Tuxedo Park was also a part of the old Monroe Township, the name evidently having been derived from Duck Cedar Pond of the old maps.

It is the main object of this paper to mention the exact locations where good mineral specimens are still available in and near the Bear Mountain Park.

In the *American Journal of Science* for 1823, Benjamin Silliman describes some minerals collected at Greenwood Furnace the previous year. A vein of anomite mica and large pyroxene crystals which he and Baron Rederer uncovered can still be seen 150 feet east of Echo Lake, to the north of the inlet. It is on the private lands of Mr. Roland Harriman, immediately outside the park boundary, and about two miles east of Arden railroad station. Silliman locates it as "18 or 20 miles South of Monroe", although actually it is but five miles by air line. Even at that early date Silliman refers to the prospect pits for iron located nearby as covered with vegetation decades old. They were dug originally because of the proximity of pegmatite, pyroxenite, and crystalline limestone. The last named is white, and contains small grains of green coccolite or of chondrodite and spinel. "About four miles from Greenwood in the direction of Fort Montgomery", Silliman found a rich locality of black spinel in very small crystals but so numerous as to form black strips several feet in length and several inches in breadth in the limestone. These ledges are still to be rediscovered. Half a century after Silliman's time, there began the real era of mineral collecting in the district, as attested by collections in the attics of several Monroe families. Two avid mineralogists were Silas Horton and John Jenkins, for whom Hortonolite and Jenkinsite from O'Neil mine were named. They were the ones who uncovered the large spinels, about four inches on a side, which can be seen in many museums. The locality was kept secret, and over two thousand dollars was received from the sale of specimens. None of the local collectors ever discovered the cache, although an unknown woman working from Southfield railroad station did find it. Probably the spinel was loose in the ground near some stream, since it occurs chiefly in the easily-weathered crystalline limestones. A recent find of placer spinel along the outlet of Upper Twin Lake was described in *The American Mineralogist* of *November*, 1941, *by A. A. Pegau and* J. D. Bates.

In pointing out the locations where good mineral specimens are available reference will be made to map of the Bear Mountain-Harriman Section of the Palisades Interstate Park, procurable from the Park Commission of 141 Worth Street, New York City. It is about 18 by 31

inches, has a scale of nearly two inches to the mile, and is in the sixth edition. Distances on this map will be given to the right and then downward from the upper left corner. For instance, Twin Lakes will be given as (21.5-2).

At the Tuxedo Park rock quarry (1-3.5), the white crystalline limestone was formerly worked for decorative white driveways. It is a quarter of a mile east of the lake on Cliff Road. At its south end where granite intrudes the limestone, the contact surface is studded with white scapolite and dark green pyroxene crystals about an inch in width. In addition, the limestone carries titanite, spinel, pyrite, graphite, and microscopic tourmaline. The granite has also pyrite, allanite, garnet, and zircon. Prospect pits in the limestone of the vicinity have the usual local misnomer, "Silver Mine". Permission to enter Tuxedo Park is difficult to obtain.

The point where State Highway 293 crosses the outlet of Barnes Lake was an ideal collecting site while the road was being built (22.7-0.9). To the west of the crossing, the road cuts through thirty feet of the crystalline limestone overlain by hornblende schist. To the east of the crossing, the granite of the ridge (Fall Hill or Brooks Mountain) contains many zircon crystals, orange in ultra-violet light. The roadway to the northward was blasted out along the hillside near the contact of the limestone with the granite or pegmatite.

The calcareous beds are white marbles, either pure or containing magnesian-rich minerals like spinel, chondrodite (more or less altered to serpentine), and phlogopite mica. One bed contains diopside of near gem quality. Protruding into pink calcite are showy crystals of dark green pyroxene (basal parting often eight inches across), of white scapolite (square prisms up to ten inches long and five wide), and of brown enameled titanite (up to three inches). The interbedded material includes pyroxenite, amphibolite, biotite schist, garnet-quartz-biotite gneiss, etc. Well-formed crystals of hornblende, epidote, and apatite stud many of the surfaces. At the present time, debris from the rock cuts forms the embankment along the west side of the highway, but it has also spilled over across an old roadway along the valley bottom, where it is readily available.

Northeastward the stream empties into Popolopen Lake. The crystalline limestone outcrops at both ends — as a "Natural Bridge" at the south end and as a 400-foot hill at the north end, where there is another old Silver Mine.

Why the early prospectors sank so many test pits and shafts in the white limestone is a question. Possibly they thought the calcite similar to the gangue of the Clausthal and Przibram deposits of central Europe. Or they may not have had silver in mind at all, but were credited with the idea by later generations. Another Old Silver Mine is located near Queensboro (21.5-5). No silver-bearing minerals are to be found in these shafts or their dumps.

Twin Lakes (Dana's "Two Ponds") deserve additional notice. At the northeastern end of Lower Twin, the limestone is pink to salmon-colored and contains abundant phlogopite crystals, apatite, and light to dark green pyroxenes. It closely resembles the assemblage at Burgess, Ontario. A four-foot basic dike has developed good epidote at the contact.

Bradley mine (16.5-4) is another good collecting site. The cut leading to the workings traverses white limestone with abundant coccolite, the lighter green being diopside and the darker augite. On the dump can be found magnetite, pyrrhotite (some in crystals), apatite, grossularite (some in shells enclosing anorthite), dark green pyroxene crystals (with enamel-like surface and enclosing blebs of calcite), and allanite in the pegmatite.

At the Rich Mine (13.5-5), not named on the map but just northeast of the Pine Swamp mine, coarse partings of magnetite can be found. In the vicinity of the Mica mine (28-8), interesting crystals and partings of dark brown biotite up to four inches thick can be found.

The locations mentioned above are the ones which have furnished notable specimens in the past. It will be noticed that the minerals are all due to thermal metamorphism of ancient Grenville limestone Prospects for further finds would be ex-

cavations in the limestone bands or ranges, especially near pegmatites. The location of a few of the bands follows.

Starting from the Silver Mine in the hill northeast of Popolopen Lake, a band of limestone takes a course about S. 32° W. along Popolopen Lake, Barnes Lake, Summit Lake, Forest Lake, east of Cranberry Lake, east of Echo Lake, south of Island Pond, and a quarter of a mile east of Tuxedo Lake.

A second band parallels the first about a half mile to the east. Starting at Round Pond (unnamed, but at the northeast corner of the map), it passes west of Forest of Dean mine, through a marble quarry a mile to the southwest, and then appears at Twin Lakes.

A less definite zone ocurs near the Hudson River. Starting three miles to the north-northeast, it appears about a mile northwest of Fort Montgomery; it is also encountered half a mile southwest and one mile south of the Queensboro Furnace Ruins (26-6). This belt is unusually high in pyrite and pyrrhotite, as well as graphite and serpentine from the chondrodite.

Occurring in distinct north-northeast ranges in the Orange County "Highlands" are sixty-six known iron excavations. Most of these are outside of the old Monroe Township. One of the most productive is the Forest of Dean mine (26.9-2) just beyond the park boundary. It has been worked intermittently since pre-Revolutionary days, and was in operation as late as 1927. It furnishes a key to the structure of the whole district, being a syncline with steeply southeast-dipping limbs and with axis pitching 23° to the N. 38° E.

In addition to the minerals mentioned in Dana from Forest of Dean (Pyroxene, spinel, zircon, scapolite, amphiboles), the waste dumps have furnished magnetite, red calcite, a red sunstone variety of feldspar, epidote, and the selenite variety of gypsum.

In conclusion, one cannot help contrasting the facilities of Bear Mountain Park at the present day with the uncharted hikes of former years. What a mineral collection could be obtained during a short vacation spent at the park! Now detailed maps are available, and distances seem much shorter; in the early days if one depended upon a compass, he was apt to travel a spiral course ending at some strongly magnetic point!

JASPERS IN SOUTHERN NEW JERSEY

By PETER ZODAC

The southern part of New Jersey is not known for minerals as very few rock outcrops are present. Nevertheless, some minerals do occur in the soils of the region and among them are jaspers.

Along the right edge of the road (N. J. 45) from Woodstown to Camden and from Camden to Burlington (U. S. 130) a number of small gravel banks are exposed and in them interesting jasper pebbles may be found.

Four years ago, while returning from a trip to Wilmington, Del., the writer made a number of stops to examine the gravels which bordered or were close to the road. Three of the stops were as follows:

The first stop was made 3½ miles north of Woodstown, on N. J. 45. Here, in a small bank 50' long, 3' high and 50' to right of road, small brown jasper pebbles seemed to be common.

The second stop was made in Camden, along U. S. 130. No jaspers were seen in the small gravel cut but milky quartz pebbles and brownish ferruginous quartz pebbles (which resembled brown jaspers) were common.

The third stop was made 2 miles north of Rancocas Creek (2 miles south of Burlington). Nice brown jasper pebbles were common in the small gravel cut that was 50' long and 2' high.

In all cuts and banks examined, quartz pebbles are very common, especially milky and ferruginous quartz; brown jaspers, which take a good polish, may also be found.

RED GARNETS BY THE TON
A Remarkable Quarry Near Lake George, N. Y.

By T. ORCHARD LISLE

On the top of Gore monutain, 3,385 ft. above sea level, and near North Creek, in New York State, there is one of the most interesting quarries to be found anywhere for the mineral hunting pleasure of rock collectors. A quarry rich with bright red garnet! The location is easy of access because one can drive right to it on paved roads now that gasoline is plentiful once again. The quarry is of particular interest because it probably is the largest Almandite garnet deposit in the world, and some of the crystals are much too big to be carried home as they are larger than the famous Beryl crystals found in Maine, and there must be thousands of tons of garnet there.

The garnet is a rich red, and many gem pieces have been cut into handsome stones. When I visited the location about five years ago, excellent rough and cut samples could be purchased from the owners at very reasonable prices. The owners run a small restaurant on the mountain top (with some hotel rooms, I believe) near the huge open cut. One could purchase pieces of garnet broken from the large crystals, and as big as your fist, for fifty cents, or a bag of garnet chips for a quarter. My wife has two cut gems of about one carat which I bought for $1.50 apiece. The garnet was sent to Germany by the quarry owners and cut there, otherwise the cost would have been very much higher. I also wandered around the quarry and secured a few pieces myself, although I found later that this was not allowed without special permission.

The sight of the huge fractured garnet crystals imbedded in the quarry walls by the dozen is something that I shall never forget. I only regret that I did not take photographs. A 20-mile drive on Route 28 from Lake George town and through North Creek reaches the entrance of the four-mile private road to the quarry. There used to be a sign there. This road is paved with garnet gravel which sparkles red in the sunlight, and forms a steady climb to the top of the mountain.

Whether or not the quarry has been worked during the war, I do not know; but formerly the garnet was mined and used as an abrasive. The garnet is exceedingly hard. One four inch piece in my collection was flat on two sides. Several of my rockhound friends tried to polish the flat sides but found it too hard, so I guess it must be at least 7.5, and perhaps a little harder. Incidently, no mention is made of this locality in the excellent chapter on the Garnet Family by G. F. Herbert Smith in his book "Gemstones" (Methuen & Co., Ltd. publishers, 36 Essex Street, London, WC2.)

According to the New York State map there is a stretch of water at the foot of Mount Blue named Lake Garnet. It is only about six miles from Mount Gore, so its name would suggest garnet outcrops. Can any readers of *Rocks and Minerals* give information regarding the same? Mill Creek which runs south from Johnsburg, N. Y., and five miles before you get to North Creek, leads directly to Garnet Lake. It sounds as if the location were worth prospecting.

Arandisite From South Africa

Arandisite is a tin mineral that was found in a tin mine located 23 miles north of Arandis, S. W. Africa. It is a tin silicate, colloidal and crystalline fibrous, whose color varies from pale to bright green. H = 5.

Arandisite, whose name is from the locality, Arandis, is associated with black massive cassiterite in massive smoky quartz.

Wulfenite Occurrence in Alaska

The only occurrence of wulfenite in Alaska, so far known, is at a small gold mine on Willow Creek, about 7 miles southeast of the small settlement of Marshall. The mineral occurs as small yellow platy crystals in cleavage cracks in the vein quartz of the mine.

Marshall is near the western end of the Yukon Valley of southern Alaska.

BLEIBERG, AUSTRIA

One of the most important lead-zinc mines of Austria is in the southern part of the country, at Bleiberg. The mine has produced many interesting minerals which have found their way into collections all over the world. The mines at Bleiberg are many centuries old and they are exceeded in importance only by those of Raibl (15 miles to the south and in the same province).

Location

Bleiberg (Lead Mt.) is in the southern part of the province of Carinthia. It is a small city of about 10,000 population and is about 7 miles west of Villach, the second largest city in the province. Bleiberg must not be confused with Bleiburg, a small village in the same province but located more to the east. (There is a Bleyberg in Belgium which also has a lead-zinc mine and which might be confused with Bleiberg).

Geology[1]

"Bleiberg lies in a deep gorge between the Dobratzsch Mountain at the south and the Ezrgebirge Mountain at the north. The ore deposits are in a fetid limestone which underlies slates of Triassic age.

"The following minerals constitute the vein filling: (a) Primary: galena, sphalerite, marcasite, barite fluorite, calcite, dolomite. (b) Secondary: cerussite, plumbocalcite, anglesite wulfenite, zinc spar, hydrosilicate of zinc, zinc bloom, brown hematite, anhydrite and gypsum. Anhydrite occurs in very considerable bodies.

"The great purity of the Carinthian galena, its freedom from antimony and copper, have made the Carinthian "virgin lead" famous."

Mineralogy

Anglesite: Nice crystals have been found in cavities of galena.

Anhydrite: Bluish, massive, and crystallized. A fine specimen at the Carnegie Museum, Pittsburgh, Penn., shows a mass of granular white anhydrite in which there are patches of celestite-blue anhydrite.

Barite: White tabular crystals.

Calamine: (Zinc spar). In considerable quantity, often in extremely delicate crystals.

Calcite: Reddish scalenohedral crystals associated with wulfenite.

One of the most interesting minerals from Bleiberg is the lumachelle or fire marble. It is a dark brown limestone full of fossil shells which often exhibit iridescent tints among which is a rich flame color — hence it is often called "fire marble". It occurs in beds forming the roof of the lead mine and its colors are attributed to the shells of a variety called Nautilus. When polished gives off in spots a brilliant iridescent luster with rainbow tints, as if the limestone was set with precious opal; it is a beautiful stone for inlaid work and for bookends, paper weights, etc.

Celestite: A fine specimen at the Carnegie Museum, Pittsburgh, Penn., is a small nodule containing ¼ inch long grayish cerussite crystals; where the nodule has been broken open on the end, it shows patches of galena internally from which it has been formed.

Cerussite: This lead carbonate is quite common and sometimes in nice crystals.

Dolomite: Zinciferous.

Fluorite: Occurs as a vein mineral, sometimes in small crystals.

Galena: In veins and beds in limestone; the main ore of lead. Beautiful crystals have been found here. A specimen at the Carnegie Museum, Pittsburgh, Penn., shows galena crystals with rounded cubic and octahedral faces, the crystals ranging up to 1 inch. Part of the galena is coated over by sphalerite in black crystal up to ¼ of an inch which are in turn partially coated by marcasite crystals up to ¼ of an inch. Another specimen at the Museum shows galena cleavages up to ¼ of an inch arranged in general in a dendritic manner, the cleavages in general also being in parallel position throughout the rock. Along one edge of the rock which is banded, there is a ¼

1 The nature of ore deposits, by Dr. Richard Beck (translated and revised by W H. Weed). McGraw-Hill Book Co., Inc., New York, 1909, pp. 569-572.

vein of banded, radiated marcasite. On the opposite edge of the rock is a tiny ½ inch vug with drusy quartz crystals on which have later deposited tiny white, tabular, barite crystals.

Greenockite: As a yellowish coating on sphalerite.

Gypsum: Occurs as a vein mineral.

Hydrozincite: (Zinc bloom). Occurs with calamine and other zinc ores as a white earthy mass or efflorescence.

Ilsemannite: Blue black to black crypto-crystalline masses which on exposure become blue. Occurs embedded in barite and associated with wulfenite.

Limonite: (Brown hematite).

Marcasite: Crystals and veins.

Plumbocalcite: Rhombohedral calcite crystals which contain lead carbonate.

Quartz: Nice crystals and crystal groups; tiny rock crystals found in the cavities of limestone.

Smithsonite: Occurs with galena and sphalerite in limestone.

Sphalerite: The chief ore of zinc and occurs in beds and veins in limestone. Nice black crystals also occur.

Stolzite: Nice crystals associated with wulfenite.

Wulfenite: Found in considerable quantity (first found at Bleiberg, too). It occurs in thin pale yellow square plates; crystallized, brownish, on grayish limestone. Beautiful wulfenites have come from this locality.

Acknowledgement

Thanks are due to Mr. David M. Seaman, of the Carnegie Museum, for notes on some interesting specimens from Bleiberg which are on display at his institution.

CHOATE CHROME MINE

By PETER ZODAC

The Choate mine of northern Maryland is one of the largest chrome mines of the state. It has been abandoned for years but interesting specimens still occur on its small dump — much of the dump has been taken away for road fill.

Location

The Choate chrome mine is located 3 miles west of Owings Mills on the Deer Park Road — 300 feet north (in back) of the abandoned country club building. Owings Mills is in the western part of Baltimore County, about 10 miles northwest of Baltimore.

Geology

The deposit ocurs in the well known Soldiers Delight serpentine barrens. Here the serpentine occurs as a barren ridge extending for some distance in a N. E.-S. W. direction. The openings, a vertical shaft and a nearby inclined shaft (25 feet to the north) are located on the top of the ridge. The inclined shaft can be entered for a short distance only due to water but some of the underground workings can be viewed from the water's edge.

Mineralogy

Among the minerals found at the mine are:

Aragonite: Grayish white incrustations on chromite.

Brucite: Thin white veins in chromite.

Chromite: Is the ore of the mine and occurs massive.

Deweylite: Grayish-white earthy masses on serpentine; also small botryoidal white masses on serpentine; and as brownish friable masses on chalcedony.

Kammererite: Violet-red flakes on chromite.

Magnesite: Earthy grayish masses on williamsite.

Quartz (Chalcedony): Pale brownish masses generally incrusted by friable brownish deweylite.

Serpentine: Grayish - green masses (common serpentine); grayish splintery masses (picrolite) with chromite; and greenish masses (williamsite) with chromite.

THE GEM BASKET OF THE WORLD

By JOHN A. QUINN
Pasadena, California

The U. S. has given the prospectors the green light, and many old timers will be taking to the hills and desert in search of their beloved minerals and gems. Three of us from Pasadena during August, 1945, took advantage of that fact and of the good weather to visit the "Gem Basket of the World" in the San Diego Mountains of Southern California.

P. E. "Gene" Linville, Gem Expert of Hollywood; Frank H. Bahr, old time Gold prospector; and John A. Quinn, Student, recently completing several War Courses in Mining Geology, Extractive Metallurgy, etc., at Cal-Tech, U. S. C. and Pasadena Junior College, in fact all three having completed two courses at P. J. C. in Mineralogy and Crystallography, were anxious to test their old theories and new-found knowledge among the Tourmaline mines of San Diego County.

After futile stops at Pala, Rincon, etc., the party wound up at Mesa Grande and visited the Himalaya Mine, formerly known as the Old Tannenbaum Mine, first opened in 1903. The present Caretaker, Herbert Hill, has been on duty there since 1904. This is one of the most noted tourmaline mines in the country, and was formerly owned by a Chinaman named Quong, now deceased, the property passing on his death to his daughter, Helen Quong, who now operates this mine.

In the early days the choice gems of tourmaline and beryl taken out of this mine found a ready market in Old China, but the War changed all that and most of the gems now find a market in this Country. Herb told me of one pink and green tourmaline, en cluster, with others of a smaller nature, among quartz, feldspar and albite with mica, of 7½ x 3 inches, which the says was the finest he remembers having been taken out by him. In those days only the choice stones were saved and the rest was consigned to the dumps, which have been screened and re-screened over the years by every old prospector in this part of the country.

The boys returned after four days, tired and sun-tanned, with a nice quantity of good specimens and some very fair stones, for their trouble. Herb is a hospitable sort and will welcome any true lover of nature who cares to visit the mine and has no objection to their screening the dumps although he laughs and says they won't find any 7½ x 3 inch gem tourmalines any more — he gets them from the inside.

Himalaya Hill (I named it that because Herb said it had no name) is between three and four thousand feet high, and is crossed from N. W. to S. E. with a great pegmatite dike containing feldspar, quartz, albite, mica, and tourmaline and beryl crystals. A great deal of the light colored feldspar in the vein contains nothing but black tourmalines, which are of a rotten nature and worthless as gems. The fine quality gems occur in pockets of red clay inside gray clay, between the wall rock, in nodules of feldspar, quartz, albite and mica, which resemble great thunder eggs, with the fine gems inside.

Peru's Greatest Lead Mine!

The greatest lead mine in Peru is at Casapalca in the western part of the country and at an elevation of about 17,000 feet above sea level. The ore body, which also contains silver, intersects Tertiary sediments and rests on andesite flows. Many interesting minerals occur in the mine, among them being:

Argentite, xled; *azurite,* tiny xls on tetrahedrite; *bournonite,* xls, *calcite,* xls; *galena,* granular lustrous masses, sometimes xled; *magnetite,* xled; *pyrargyrite,* xled; *pyrite,* cubes and in pyritohedrons; *quartz,* milky xls, rock xls, and smoky xls; *realgar,* small red grains with milky quartz; *rhodochrosite,* pink, cleavable; *rhodonite,* pink grains in veins with quartz; *sphalerite,* light brown xls; *stibnite,* lustrous blades, often radiating; *tetrahedrite,* coarse xline, sometime in xls.

Most, if not all, of the above minerals and in good specimens are in the collection of Mr. Carl H. Klein, of Hudson, N. Y. Mr. Klein is a member of the R. & M. A.

MAMMOTH REMAINS COMMON IN SIBERIA

The mammoth was a huge elephant which inhabited the temperate regions of the northern hemisphere during the glacial period. When the glacial period disappeared, so did the mammoth.

Fossil remains of the mammoth are found in many parts of the northern world but they are especially common in Siberia where fossil tusks have been collected for centuries.

At the beginning of the 19th century, an entire carcass of a mammoth was found frozen and encased in ice in a cliff at the mouth of the Lena River in northern Siberia,. The animal measured 16 ft. 4 in. in length (from the fore part of the skull to the end of the tail, exclusive of the tusks), and was 9 ft. 4 in. high. The skin was thick and covered with reddish wool and long black hair. The flesh was so well preserved that dogs and wild animals fed upon it.

According to de la Beche[1], the carcass was found in 70° N. latitude, near the embouchure of the Lena. Furthermore, he wrote:

"Mr. Adams, who carefully preserved what remained of this animal, relates that it was first observed as a shapeless mass by Schumakof, a Tungusian chief, and owner of the peninsula of Tamset, in 1799; that this ice-covered mass fell upon the sand in 1803, and that, in the next year, the chief cut off the tusks, the fossil ivory, if it may from its comparative freshness be so termed, found in these regions, being an article of commerce, Mr. Adams, visiting the spot two years afterwards, obtained the skeleton, still in part covered by the fleshy remains, with portions of its hair, which, together with the tusks, subsequently purchased, is now preserved in the Museum at St. Petersburg; and a description is given of it in the "Memoirs of the Imperial Academy of Sciences," vol. v, of which a translation was published, with a figure, in London, in 1819."

1 The Geological Observer, by Sir Henry T. de la Beche, Blanchard and Lea, Philadelphia, 1851, p. 286.

MINERAL COLLECTING IN FRANCONIA, N. H.

By SAMUEL C. BROWN

For several years the writer has spent vacations in the Franconia Notch section of New Hampshire, and as usual browsed around the ledges, sand pits and river beds in search of specimens.

One dry season, when he spent an afternoon walking over the bed of a branch of the Ammonoosic River in Franconia, he was rewarded by specimens of water worn pebbles of green tinged with pink Jade, good colored Citrine pebbles, several fine Jasper pebbles of various shades, including the black variety (often called touchstone), several fair Ironstones, and very good Milky Quartz pebbles, Hornblende and some rock specimens.

The question, where did those Jade pebbles come from? He never heard of any nephrite in this locality.

From the river he wandered over on the hill to the gravel pit. This was not such a fertile field as the river bed, however, he did pick up several fair Ironstone Geodes, conglomerates, a specimen of Limonite, a fine veined Hornblende pebble, and some Citrine pebbles.

On the Farm was told that a number of years ago there had been a couple of test pits drilled for Copper. However he could not locate them or any rocks that showed evidence of a Copper stain.

Stopped at the Magnetite mine in Lisbon near Franconia and secured a few specimens of that ore (rather think that the best specimens had been combed by "rock hounds" at a previous date).

Did not have time to look around Littleton, where, he was to'd. one may find fossils and some good ore specimens.

Since this trip have always prowled around dry river beds and gravel pits.

PIONEER SAPPHIRES

By ANNIE KEELER WILLIAMS

Obtaining a copy of *Rocks and Minerals* for December, 1943, I saw an article entitled "Sapphires by the Bucketful".

I thought you might be interested to know something of the history of the sapphires down on the Missouri River in Montana.

In the summer of 1866 my father, Col. G. W. Keeler and my mother, with a partner, owned a placer claim on the Missouri River near what was known as Canyon Ferry, before Hauser Lake was made.

There was a great deal of gold to be mined there and pioneer equipment was made. My father told mother she could have all the gold she could pan. After her housework was done she would go out and pan gold. She said she usually made about a dollar a pan and found many gold nuggets, which she kept for years in her trunk. There seemed to be a handful of the nuggets and one mother described was very pretty and shaped like a sugar bowl. I still have one of these nuggets.

While panning gold she quite frequently ran across, what she called pretty little colored stones. One of the men working there found a pretty red ruby and my father offered him $10 for it, but he sent it to Tiffany and Sons in New York from whom he received $400.

My father sold this gold claim to his partner, who made more out of the sapphires than they had made out of the gold.

Before coming to California, twenty years ago, I lived for some time at Philipsburg, Montana, and so knew about the sapphires occurring there. One day my daughter went out to hunt them and brought back some. One of the stones found, a dark blue sapphire, was cut and polished and set in a breast pin. It was a beautiful gem and I still have it.

BIXBYITE NAMED FOR MINERAL DEALER

Bixbyite is essentially manganese oxide with some titanium. It occurs in small black cubes. It was first found, in 1896, by Maynard Bixby, of Salt Lake City, Utah.

Maynard Bixby was a mineral dealer and one of the best known in his days. His ads appeared regularly in *The Mineral Collector* and he contributed many interesting articles to that magazine. The mineral was examined and described by S. L. Penfield and H. W. Foote (*Am. Jour. Sci.*, 4, 105, 1898) who named it after its discoverer. Their description stated that bixbyite occurred with topaz and decomposed garnet in rhyolite on the edge of a desert, 35 miles southwest of Simpson, Utah. The following are the first two paragraphs of a paper written by Bixby:[1]

"The past year has been quite prolific in finds of good minerals and new varities. Some old finds have been renewed, in better specimens than ever, while probably three new finds, two of them new species, have been added to the already large list of Utah minerals.

"One of these, Bixbyite, is found in a desolate and waterless spot in the desert, about 120 miles southwest of Salt Lake City. It has so far proved quite rare in good crystals, and these were found in a very limited area, on the side of a low ridge to which we had to haul water 35 miles for use of men and horses, and miserable milky-looking alkaline stuff at that. We could haul only enough water to last us 24 hours, but we employed every hour of daylight, until the place seemed to be hunted clean."

Bixby later identified the locality as on the southerly end of the Dugway Range, in northern Juab County (of western Utah) where bixbyite occurs on topaz and rhyolite.[2]

1 Notes on collecting in Utah, by Maynard Bixby, *The Mineral Collector*, June, 1897, pp. 52-54 (New York City).

2 A catalogue of Utah minerals and localities, by Maynard Bixby, 4th edition. 1916, p. 6 (Salt Lake City).

MOLYBDENITE AT NEWPORT, N. H.

Newport is a nice little village in central Sullivan County of southwestern New Hampshire. Dana lists molybdenite as having been found there but Mrs. F. H. Cram, a member of the R. & M. A. residing in the village, can find no trace of the old locality.

In 1931, when a local contractor, Frank Reivo, was engaged in building a series of new homes in Newport, he came upon a most interesting rock or boulder in a cellar excavation. He found it necessary to blast away about 10 feet of its depth and even then it extended down into the ground indefinitely. But what made it interesting was that it was quite "plummy" with what seemed to be wads of tin or lead foil. Knowing that Mrs. Cram's son, Burton, was keenly interested in minerals, Mr. Reivo brought the wads to his attention — they were identified as molybdenite. The molybdenite is associated with calcite, feldspar, quartz, hornblende — in black mica schist — as beautiful as it is interesting. A very fine specimen of the molybdenite was presented by Mrs. Cram to the Editor of *Rocks and Minerals.*

A large granite mass in the cellar excavation (which also had to be blasted) was noted by Burton Cram and he believes it was part of the bedrock. As this granite also contained molybdenite, though in lesser amounts than in the schist, it would indicate that the mineral was native to Newport. The conclusions drawn by Mr. Cram are that a granite-schist contact is in the vicinity (concealed by glacial drift) and that molybdenite penetrates both rocks.

Whether the molybdenite is present in any valuable quantity will perhaps never be known as the owner of the property is fond of his new home and has no interest in minerals. The locality is on a slope of Pinnacle Mountain, bordering on Whitney Avenue, in the northeastern part of Newport. A careful search of this mountain might result in another molybdenite occurrence.

Pfc. Burton W. Cram, is now in the U. S. Army. He was recently stationed in Italy, but is now home on a furlough. He, too, is a member of the R. & M. A.

CHILEAN RIVER BED YIELDS GRATUITOUS COAL SUPPLY

SANTIAGO — The Lebu river in the province of Arauca sometimes escapes its bounds, rampaging angrily through the capital city of Lebu, destroying and inundating homes. Then, as if repenting and compensating the citizens for damage done, the river flows tranquilly and permits the reclamation of 10,000 kilos (22,000 pounds) of coal each day from its bed.

Armed only with shovels and baskets, a small army of women and children daily dot the shallow waters of the Lebu and raise from its depths ample supplies of coal of excellent quality.

Two reasons are advanced for the phenomena of the Lebu river: The first is that vast, unexplored mines exist under the river bed and along the side of its course. The erosion of the water and force of the river current dislocates great blocks of coal, which spread widely through the river on its way to sea.

The second explanation is another version of the first: That there are innumerable abandoned mines near the river, and that the Lebu is now proving the fallacy of former owners — that coal veins were exhausted.

It is estimated that enormous quantities of coal are lost in the river as it flows to the sea, and it is being proposed that the government take some interest in a mineral study of the Lebu for commercial possibilities.

Lebu is a seaport 80 miles south of Concepcion, on the west coast of Chile; it is also at the mouth of the Lebu River.

A COLLECTOR IN CHINA

An interesting letter from a former member of the R. & M. A., T./Sgt. Ivan H. Mercer, of Denver, Colo., to Guy B. Ellermeier, also a member and likewise residing in Denver.

Somewhere in China
August 9, 1945

Dear Guy:

I have sent quite a little in the way of stones home to my wife, and knowing our interests along that line are somewhat the same, both of us would be glad if you would stop by the house sometime. I have been able to get some real bargains, therefore I don't feel as though I have wasted what little money I have spent on stones and souvenirs. I got three star sapphires in India, the rest of the stones here in China. I have some beauties in the way of carved jade, coloring going from white to deep green. I find that there is some aquamarine around here someplace, also alexandrites and cats-eyes. The native Chinese jade is usually white, the green coming from Burma and Tibet and is usually carved here, the Chinese using stream sand and bamboo, you can see the time it takes to carve some of the pieces.

There is some beautiful carnelian and sard-onyx found here in quite a few places, I found a little myself along with some pretty little banded agates, these were found on a trip some time back. I also picked up some quartz crystals that were fair. I would like to look over certain areas here, but there seems to be a war going on, and then again it isn't too safe to wander too far by yourself in this part of China.

Someday many minerals will be brought down from these highest mountains in the world, but at preseent there is so much that is unexplored, and even if deposits were found, the ores would have to be brought in carts pulled by water buffalo, or in some parts by the small horses, by this transportation and foot is the only communication most people have with the modern part of China. Many villages near here still have never seen a white man, and we still find Chinks that comment at our hairy faces and arms. They watch us eat, work, in fact everything we do; we are as strange to them as they are to us, I guess. With all of the filth and sickness in China, India still has her beat, however.

I have been surprised to find the different terrain, from thick jungles to dry sand country, from the damp climate where the monsoon hits to the flat places where there are dust storms.

They say that there is pretty good hunting around here, pheasant, tiny deer about as tall as the average dog, bear, tiger, leopard, cats, etc., there sure is some rough uninhabited country, I was surprised, it would take a person months to get out of some places, if he ever did get out; many of the people are friendly and will help a G. I. towards a base.

Your Friend,
T./Sgt. Ivan H. Mercer
315th Air Service Group

New 'Gem' Location — Plenty For Everybody

Doubtless many gem collectors will flock to the scene of the great atomic bomb test explosion in New Mexico as soon as the Army will permit, for the enormous heat and pressure suddenly developed 'crystallized' the surface earth. The nearly half-mile-wide crater is covered with an almost unbroken expanse of Jade—and turquois-colored glass, presumably on the order of obsidian. The novelty of a pin, necklace, earrings or bracelet cut and polished from the atomic bomb area doubtless will appeal to the wives and daughters of many rockhounds.

A word of warning. There may be danger from X-rays at this locality, because the bomb was exploded close to the earth. Two months after the great explosion the rays had died down to the point where an half-hour stay in the crater was safe

Multi-Colored Stone For Cutting and Polishing

As you drive past Oak Ridge Reservoir on Route 23 in New Jersey, on the way to Franklin, you pass thru a deep road cut. Just before coming to the road cut there is considerable rock from the cut that has been dumped near a small pond on the right hand side of the road. This rock is multi-colored and suitable for paperweights; ash trays and bookends. It is unlike any other rock that the writer has ever seen. A mixture of greens and pinks dominate. If you walk up over the slope to the railroad, the latter passes through an outcrop of this colored rock, only the surface has corroded from exposure and smoke, and the colors do not show until you use the hammer. Beware of passing trains, because the space between the rails and the rock is insufficient for the safety of rockhounds at work.

Celestite in Pennsylvania

Celestite, which is strontium sulphate, has been found sparingly in Pennsylvania. Its chief locality in the state is Bellwood, in northern Blair County (in the central part of the state) where it occurs as pale blue fibrous layers of varying thickness up to one inch thick in limestone (one mile north of Bellwood station on the west branch of the Juniata, at the foot of the western slope of Brush Mountain). The mineral is also found at Williamsburg, E. Blair Co., as prismatic crystals, faintly bluish.[1]

Bellwood, formerly Bells Mills, was once a part of Huntingdon County (there was then no Blair County), is about 12 miles north of Franktown which was quite a locality for the mineral over 100 years ago. Celestite was said to occur also in great abundance near the Frankstone Gap of the Alleghany Mts., where the locality was said to extend 14 miles.[2]

Celestite, fibrous, pale bluish, has also been found in limestone at Tyrone, in northern Blair Co.

If any reader of *Rocks and Minerals* is familiar with the celestite occurrences in Blair County, we would appreciate an article on them.

1 The Mineralogy of Pennsylvania, by Samuel G. Gordon, Acad. of Nat. Sci. of Phila., Philadelphia, Penn., 1922, pp. 142, 160.

2 Algers' (Phillips Mineralogy), Boston, Mass., 1844, p. 312.

An Attractive Specimen From Pennsylvania

One of the most attractive specimens which can still be found in Pennsylvania, is the azurite-copper-cuprite-malachite in aporhyolite from S. W. Adams County. Specimens may be found at a number of the old abandoned copper mines of the county but the one most noted for beautiful specimens is the small prospect working known as the Bigham mine located about 5 miles west of Fairfield, in the southern part of the state. The specimens from this mine take a beautiful polish and have been cut for paper weights, cabochons, etc.

Brenner Pass of Austria

The Brenner Pass, the lowest pass over the main chain of the Alps, is traversed by the oldest of the Alpine routes, once used by the Romans. It is 4,588 ft. above sea level (the mountains on each side rise about 7,500 ft. above the pass which is open at all seasons of the year). The railway, built in 1863-1867 and opened in 1867, one of the grandest works of its kind (21 tunnels, 60 large and many small bridges), is the shortest route between Central Germany and Italy.

At the summit of the pass is the small village of Brenner in a valley devoid of view forming the watershed between the Black and Adriatic Seas. At the railroad station in Brenner is a memorial to the builder of the railroad who died in 1865, K. von Etzel.

Brenner Pass is about 24 miles south of the city of Innsbruck, in the northern part of the old Austrian province of Tyrol. The Pass was annexed by Italy in 1920 but no doubt it will revert back to Austria.

Near the Pass, nice little crystals of titanite occur in the gneiss of the mountains.

Cobar Copper Mines of Australia

The old copper mines at Cobar, N. S. W., are noted for nice mineral specimens. Cobar is in southern Robinson County, in central New South Wales, in the southeastern part of the country.

Among the minerals occurring at the mines are: atacamite (xled), azurite (very attractive specimens), bismuth, bornite, chalcocite, chalcopyrite, chrysocolla, copper, cuprite (xled), dioptase (xled), and malachite (very beautiful xled specimens).

Agates at Denver, Mo.

Dark reddish brown water-worn pebbles of ribbon agate occur at Denver in S. E. Worth County, of northwestern Missouri.

The agates take a beautiful polish and many specimens have been found by local collectors. Dark red jaspers also occur here.

BERT TABOR

By DONAL HURLEY

Mineral collectors in all sections of the United States and some collectors living in foreign countries knew Bert Tabor of Middleville, Herkimer County, New York. For over half a century Bert had mined and sold, either direct to visitors or by mail, the beautiful and brilliant rock crystals found in the Middleville area. Associated with Bert as a sort of silent partner was his brother, Steward; but after the death of Steward, about five years ago, Bert carried on alone. Then, on one of the most bitterly cold nights of the past winter, death tragically found Bert Tabor.

To reach the Tabor place, which stands on a piece of flat land overlooking the valley, you scale the twenty foot face of a rock highway cut by means of a wooden ladder. A path leads from the top of the ladder to the Tabor home. On this fated winter night, Bert had been in the village of Middleville to purchase groceries. He left the village about eleven o'clock at night for the short walk home and at nine the next morning he was found hanging backwards down the ladder, his left leg wedged between the top rung and the cliff wall. He had evidently slipped at the very top of the ladder and in falling backwards not only become wedged but also struck his head which rendered him unconcious — the twenty degree below zero weather claimed him a victim before he fully recovered. Thus passed Bert Tabor.

Bert was a friendly man who liked company seemingly even better than he liked selling crystals. He was both kindly and mild mannered, and the mildness was reflected in his speech. Bert was an interesting conversationalist. He knew the history of his community and the people of it. Like most boys raised on a farm he was a naturalist. He read considerably and took a keen interest in current affairs. Only in the science of quartz crystals did he disappoint; but if we remembered Bert as a digger of crystals rather than a student we could gain much from his experiences and observations. Only those folks who had time to sit and talk came to know Bert Tabor.

A few weeks ago through the kindness of Mr. and Mrs. Adrian Petrie (Mrs. Petrie was a Tabor), I visited the property at Middleville in company with Dr. Engel and his wife of the Geological Survey. We found the last pit opened by Bert already partially filled with dirt which recent rains had turned into mud. We found some crystals and rock specimens containing in matrix both crystals and associated minerals which seemed to please Dr. Engle as he wished them for examination rather than collection. But the property has been POSTED which probably writes a final chapter in one more phase of Middleville quartz crystal history.

Thus closes the saga which Bert Tabor gave birth over a half century ago.

Agate Occurrence in Iowa

Small banded agate pebbles, reddish brown in color, appear to be common on the beaches of Iowa River near Marshalltown, Iowa. Gray to reddish, translucent, pebbles of chalcedony are also common on the beaches; also dark brown pebbles of petrified wood (jasperized). All these three minerals take a beautiful polish.

Marshalltown is in eastern Marshall County, of central Iowa.

Barite in Fulton Co., Penn.

Barite, in bluish-white, granular and lamellar masses and as thin veins cutting Clinton red shale, was once mined near Fort Littleton of N. E. Fulton Co., in southern Pennsylvania. One occurrence was on the old Silas Locke farm.

Onyx Marble at Ashfork, Arizona

An onyx marble of great beauty occurs at Ashfork in northern Yavapai County of north-central Arizona. The stone is brownish in color, banded, and is much used as an ornamental stone.

"ME AND PA." TWO OLD ROCKHOUNDS

Dear Editor:

The only reason I have been writing you these notes is because Pa would be sure to tell you if I did not and I am afraid he would be apt to stretch the truth when it comes to telling stories about me. Now that I have something else to write about I can assure you that you may depend on getting the truth in every detail as it is about Pa this time.

He had been busy all afternoon pulling out drawers in the specimen cabinet and then pushing them back again until I am sure he pulled out and pushed back every-one of the eighteen and it is about one of his prize specimens, that was the cause of the dejected look for the past two or three days, that he passed to me for examination. Always when he passes me a specimen with a special grand flourish I must stop everything I may be doing at the time and examine said specimen and listen to the details, of where he found it and directions to get there and all minor specimens he found in that special place.

"This specimen, Ma, came from San Bernardino Co., Calif., 5 miles south of Crucero at a place called Mesquite Springs. These springs are at the foot of a butte and the Tonopah & Tidewater R. R. runs right by it and crosses the Union Pacific at Crucero." Pa held this piece of granite up in front of my nose and I was compelled to take it though I had viewed those quartz crystals inside it before. This time I am truly happy that I did take it in hand again to examine it. After I had it and was examing those delicate crystals, I'll admit they are pretty, Pa, as usual, went ahead telling about the other finds he made there.

"Ma, I also found those petrified pine bark specimens there and some very fine chalcedony and agate arrow heads and one tomahawk but that cluster of crystals in that vug of granite can not be beat but you must get the light just right to see those delicate crystals in the extreme back end."

"Yes, Pa," I said, in order to slow him up on his *lecture,* "but it is no longer necessary to look close to see those wonder crystals that you have wondered about the classification, for they have wiggled down to the front now." There the dream faded for it was the skeleton of a grasshopper that had been confined among those toothpick size quartz crystals and heretofore only the legs was faintly visible.

Just what Pa said when he discovered what a let down he had received I am unable to translate but the 'said boy caught stealing apples could not have looked more chagrined.' He gave those beautiful crystals away, minus the grasshopper.

Though you know who Pa is, I would advise that you do not publish his name with reference to this note.

Yours truly,
Me, of the Two Old Rockhounds.

First Oil Well Drilled in Pennsylvania

The first oil well drilled in America was sunk in 1859 by Col. Edwin L. Drake, at Titusville, Crawford County, in N. W. Pennsylvania. The well is now in Drake Well State Park and a monument marks the exact site where the oil was struck on August 27, 1859. This well was only 71 feet deep but it was the beginning of America's great oil industry.

Amber Occurrences in Alaska

Amber has been found at several localities in Alaska. One interesting occurrence is the Chicago Creek coal mine where small pockets of amber have sometimes been found during mining operations. The mine is on Chicago Creek (a tributary of Kugruk River), in northwestern Alaska.

Another occurrence is in the vicinity of Wainwright, where small pieces of amber are occasionally found. Wainwright is on the Arctic coast in northwestern Alaska.

The Amateur Lapidary

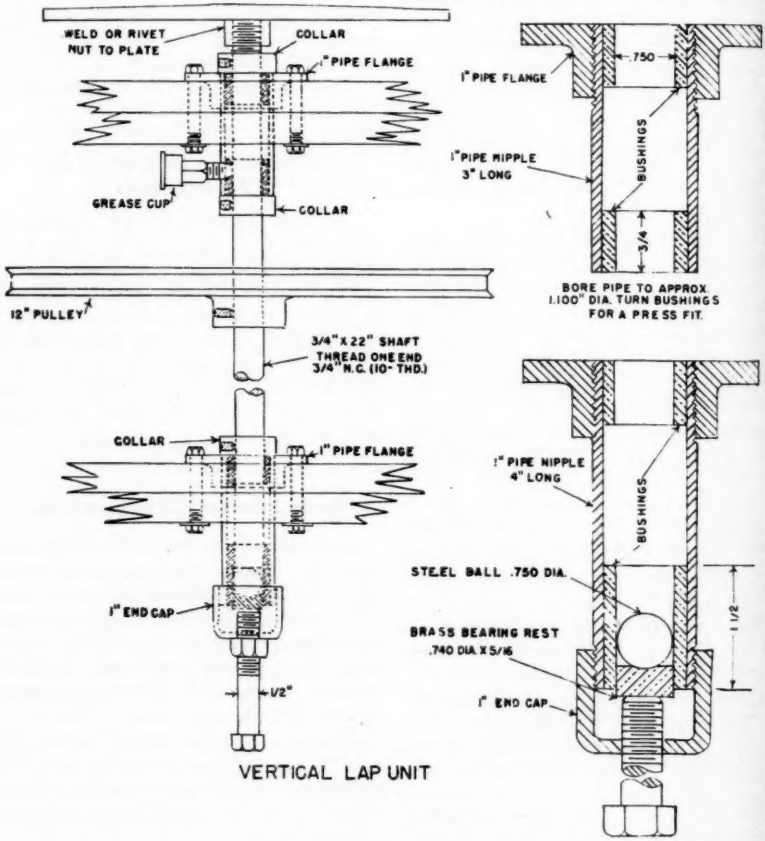
A HOME-MADE LAP UNIT

By W. T. BAXTER

A horizontal running lap upon which one can lap and polish flat surfaces, cut cabochons or faceted stones, make spheres or book ends, can be made on a screw cutting lathe. If one does not have access to a lathe, one can, by making a few substitutions, make a unit that will serve admirably.

The vertical shaft is threaded on one for a ¾" N.C. nut. Make the top and bottom bearings by screwing a 1" pipe nipple into a pipe flange and boring out the inside of the pipe on a lathe. Turn bushings for a press fit. Press them in place and drill and ream or bore for the shaft. The ¾" steel ball serves as a thrust bearing.

The lap plate can be made of boiler plate or other suitable material ⅜" or ½" in thickness and can be flat, instead of tapered, if lathe facilities are not available. Lay out the plate on the metal, ring



VERTICAL LAP UNIT

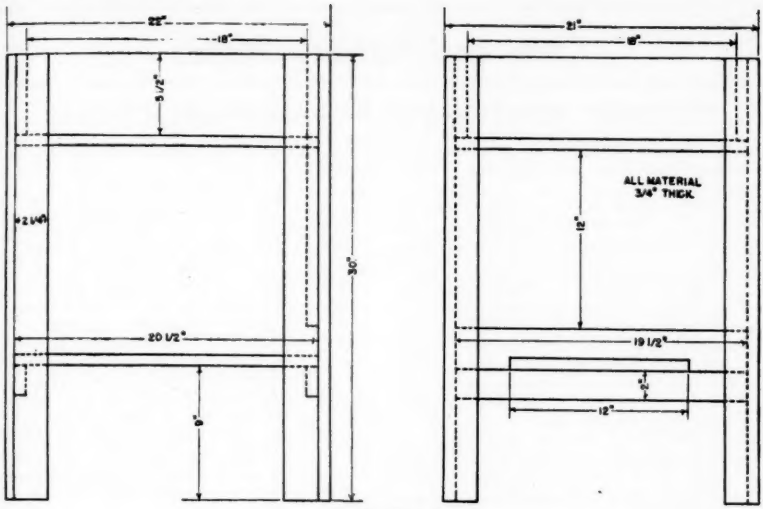


Table For Lap

with a series of holes. Saw out between the holes and file to layout line. Rivet or weld nut in place. By boring a small hole in center of plate, placing plate upon a piece of wood, one can grind the lap plate by revolving plate against a grinding wheel, using the drill as a pivot.

If lathe facilities are not available have the shaft threaded and make the rest by hand. Use split pillow block bearings for top and bottom bearings. For a thrust bearing bore a hole part way through a piece of hard wood and drop the steel ball in place, letting the shaft rest on the ball.

The unit may be made single, if desired, by making two sets and mounting same in a longer table. A 12" pulley on the vertical shaft, and a 1½" pulley on motor will give a good speed, slightly more than 200 r.p.m. A ball bearing 1/3 h.p. motor, mounted vertically, will power either a single or double unit.

Anthraconite Near Norwood, Michigan

By CARL E. WULFMAN

Anthraconite, sometimes known as stinkstone, is a rare variety of calcite. Near Norwood, Michigan, it forms long triangular gray brown crystals which belong to the rhombohedral division of the hexagonal system. These are packed closely together and give the mineral a columnar structure. When anthraconite is broken the pungent odour of petroleum is noticed. Thus the name stinkstone.

The anthraconite occurs as boulders strewn along the Lake Michigan shore south of Norwood. Norwood is a small village about 8 miles south of Charlevoix, a popular resort in northern Michigan. At first sight the boulder where I collected looked like a very much weathered tree stump. The anthraconite originally occurred in the Antrim shale of the Mississippian series. Quite a bit of this shale is also in evidence along the beach.

The locality may be reached easily from Charlevoix. Take U. S. 31 out of Charlevoix and follow it to the Norwood turnoff. Turn right here and follow the road into Norwood. Then turn right onto the road to the beach. It is about a half mile hike from the end of the road to where the specimens may be found. Along the beach there is a fine spring where a refreshing drink may be had.

Club and Society Notes

PICTORIAL NOTES ON THE PAN-AMERICAN HIGHWAY

Mr. G. Haven Bishop was the speaker at the August 16th, 1945, meeting of Los Angeles Mineralogical Society and his subject was "The Pan-American Highway." Mr. Bishop, a member of L. A. M. S., has been away for 2½ years, during which time he was official photographer with the U S. Army Engineers building the Pan-American Highway and his talk was illustrated with an extensive and varied series of fine color pictures, which vividly portrayed the difficulties and hazards incidental to highway construction in countries where often the only roads were deeply rutted trails made by ox carts and at elevations ranging from sea level to 11,000 feet.

Space does not permit a detailed description of the many excellent pictures which showed much of the geology of the various countries and close ups and long shots of many quaint towns and the life of the people in the countries thru which the highway will pass, as well as scenic views of great beauty and glimpses of tropic vegetation with tree ferms 30 feet high and vines growing up into trees 50 and 60 feet. There were views of Costa Rica Airport, one of the most beautiful in the world; of San Jose's corrugated roofs and narrow streets and the Masonic Hall which is said to be the only Temple built according to Masonic traditions; coffee trees, some showing the white blossoms and others red berries which looked like cranberries; orchids of breathtaking beauty growing in amazing profusion (there are said to be about 2500 varieties of them); the intriguing Traveler's Palm, so called because no matter how it is planted it will eventually turn until its fronds are pointing east and west; and of course Mr. Bishop did not fail to include pictures of beautiful native women. This preview of a highway in which we are all so much interested was very much enjoyed.

It is estimated that it will be between two and three years before the highway will be complete enough to be traveled, as work in Costa Rica, for example, progresses very slowly on account of the long rainy season, during which about 200 inches of rain falls and there are only about three months when work can be done. By the time the road is open we will probably all be trying out new jallopies and the chances are many of us will be getting acquainted with our good neighbors along the Pan-American Highway.

Door prizes were won by Mr. Newell and Mrs. Ferguson and winners in the book raffle were Mrs. O. C. Smith and Mrs. Gotfredson.

Messrs. Forbes, Craighead and Gillingham were elected to serve as a nominating committee for officers for the Society for next year.

The September meeting will be the birthday celebration of the society and past presidents of the group will be present and will be the speakers of the evening. Visitors are always welcome.

(Howard Paget, Publicity Chairman)

Newark Mineralogical Society

The 233rd meeting of the Society was held in the South Gallery of the Newark Museum, Newark, N. J., on Sunday May 6, 1945. The meeting was called to order by the president, Mr. Herman E. Grote.

Program for the afternoon consisted of an exhibit of cut and polished gems and minerals; the exhibitors giving short talks on their experiences.

Attendance 45, including 5 visiting members from the New Jersey Mineralogical Society.

The 234th meeting of the Society will be on Sunday, October 7th, 1945, in the South Gallery of the Newark Museum. The program for the afternoon will be devoted to a talk by Mr. Ernest Weidhaas whose topic "Freak simulations in minerals" will be illustrated with specimens from his private collection.

Louis Reamer, Secretary.

New Jersey Mineralogical Society

A special lapidary meeting was held at the home of E. G. Conrad, a member of the board of directors of the Society, on Tuesday, September 4th, 1945. A demonstration of some lapidary methods was given.

The Society meets at the Public Library, Plainfield, N. J.

Boston Mineral Society

Experiences of the season in collecting. This was the program on Tuesday, September 11, 1945, of the Society which meets at the New England Museum of Natural History, Boston, Mass.

Mineralogical Society of Southern California

"Collecting minerals in Brazil", by the Society's president, Jack G. Streeter, was the title of the talk given at the September 10, 1945, meeting. The feature of the evening's program was a display of minerals collected by Mr. Streeter while in South America last year.

The Society meets at the Pasadena Public Library, Pasadena, Calif.

Texas Mineral Society

The Texas Mineral Society heard a very interesting talk by Mr. Frank Howell of his explorations of the "Texas Val Verde County Prehistoric Shelters" at its August meeting, held at the Baker Hotel in Dallas, Texas. Many Indian artifacts found by Mr. Howell in these shelters were on display. He said that archaeologists have not yet been able to determine from where the inhabitants of the shelters came or why and when they left, but that they did know that they had never seen a white man, because the murals, of which there were many on the walls of the shelters, gave no indication of the influence of white men.

J. D. Churchill
Director of Publicity

Los Angeles Dana Mineral Clubs

Held their regular August meeting on Friday, August 10th, 1945, and had two fine speakers: Dr. John Herman, D. Sc., who spoke on "The Future of Western Minerals" and Mr. Howard Kegley, Geologist and Editor of the "California Oil News" of the L. A. Times.

Dr. Herman outlined a rosy future for minerals in the Western States after the war, and read from his notes of 1932 telling us of the timely subject of the power of the atom, which he says will soon be harnessed for the good of industry and all mankind. Dr. Herman, with the assistance of another learned Doctor, conducted experiments with Uranium, applying millions of pounds pressure, and producing tiny diamond-like particles which glowed for hours thereafter. Knowledge of the results of these experiments reached some Scientists in Belgium and France — even Madame Curie herself, who conducted further experiments, but for lack of funds were compelled to suspend these experiments, and it took Uncle Sam to finish the job at the cost of over Two Billion Dollars, to produce the atomic bomb.

Mr. Kegley's talk, entitled "A Geological Buffet Dinner", second in a series of such lectures, was strewn with dry wit and humor, toegther with a thorough knowledge of the geology of oil, especially in and around these parts and was entertaining and instructive.

John A. Quinn

Wisconsin Geological Society

The first meeting of the new season was held on September 10, 1945, at the Public Library, Milwaukee, Wisc. The program was a "free for all" — the President (Frank Nelson), calling on different members present for a few words on their summer activities.

Marquette Geologists Association

"Old Fossils", by Arthur Sanger, is the title of a most interesting article which appeared in the September, 1945, issue of the *Bulletin of the Marquette Geologists Association.*

The Association meets at the Academy of Sciences, Chicago, Ill.

Queens Mineral Society

A meeting of the Society was held on September 6, 1945, at its headquarters in Richmond Hill, N. Y. It was called to order at 8:15 p.m. There were 24 members and guests present.

The program committee announced that Mr. Blair Burwell, Vice-President of the U. S. Vanadium Corp. would be our speaker for October.

It was suggested that we change our day of meeting due to the poor acoustics in the present meeting room. Mr. Maynard was appointed to contact the church secretary for a more appropriate room on a different day. It was also suggested that the church be asked to post a notice, in their bulletin, of our meetings.

It was also suggested that the Society's secretary contact Rutgers University in regards to a trip on October 21st to view the Roebling Collection.

Mr. Segeler showed an article, from the *Saturday Evening Post,* on the atomic bomb and its relation to minerals. This article was donated by him to the Society's library.

It was announced that the course in megascopical petrology will start Monday, September 17th, at the home of Mr. Allen Green. Mr. Green has graciously consented to instruct the class every second Monday.

The meeting was then turned over to Miss Ruth Grotheer who spoke on the "History of garnets." Then to Mr. Maynard who spoke on the "Mineralogy of Garnets."

Mr. Ashby presented the female members and guests with cut Bohemian pyrope garnets.

Mr. Fredericks reported on a recent trip through New England made by his wife, Mr. Adolf Koerber, Mr. Walter Helbig, and himself. He then distributed specimens to the members.

There were four new members elected to the Society. They were Mr. Charles Kacsur of Brooklyn, Mr. James Garriti and Mr. Dante Penatore of Queens, and Mr. Wm. Pfeifer of Hackensack, N. J.

The meeting adjourned at 10:20 p.m.

Respectfully submitted,
Theodore Fredericks, Secretary

East Bay Mineral Society

The first meeting of the new season, opened with a dinner, was held on September 9, 1945, at Robin Hood Inn.

On September 20th, the second meeting was held at the Society's headquarters, Auditorium Lincoln School, Oakland, Calif. Dr. Ralph W. Chaney, Paleobotanist at the University of California, was the speaker for the evening whose subject was "Ancient forests of California."

. . . With Our Dealers . . .

Want any nice Naica selenites or Durango cassiterites? Roberts and Stevens, of Monterey Park, California, have nice specimens in stock.

Don R. Ivers, prop. of the West Coast Mineral Co., of La Habra, California, is selling out his stock due to the fact that he will soon be called into the army. Every item in stock is to be sold — at bargain prices!

Please note! Schortmann's Minerals, of Easthampton, Mass., have no atomic bombs for sale, even if their ad is captioned with this deadly war instrument. All their specimens are gentle and harmless — for peace loving mineral collectors?

A. L. Jarvis, of Watsonville, California, is featuring grinding wheels and crystolon grains this month. Of course he has cutting material and nice minerals in stock, too!

Krueger Lapidaries, of Los Angeles, California, are featuring some attractive gem bargains.

The Yellowstone Lapidary, of Miles City, Montana, is with us again and again offering nice agates, jaspers, etc.

Charles E. Hill, of Phoenix, Arizona, reports he is opening 9 gem agate deposits and some jasper deposits close to his city. If these minerals interest you — better contact him at once.

Ward's Natural Science Est., of Rochester, N. Y., announce that they have in stock the new and unique mineral from Brazil named brazilianite. Better get one before the stock is exhausted.

Two interesting Colorado minerals are offered collectors this month by Hermosa Gem and Mineral Shop, of Durango, Colorado. Look them up!

Attenion cutters! Jack Natteford, of Los Angeles, California, has some interesting cutting material from Mexico.

The Wiener Mineral Co., of Tucson, Arizona, feature some more of their choice mineral specimens. One ad is devoted to $1 specimens; another to $2 specimens.

Have you a magnetite xl from Magnet Cove? The Ozark Biological Laboratories, of Hot Springs National Park, Arkansas, have some nice specimens in stock.

A new advertiser this month is R. F. Alexander, of Grand Junction, Colorado, who features an interesting uranium ore.

"Streamliner" diamond saws, manufactured by Wilfred C. Eyles, of Bayfield, Colorado, are continuing in popularity. Just read his ad to be convinced!

Have you a showy carnotite in your collection? Pan-American Mining Co., of Bayfield, Colorado, can furnish attractive specimens!

L. D. VanCleave, prop. of the White Elephant Museum, in Joplin, Mo., is with us again. He speciallizes in Tri-State minerals.

Hatfield Goudey, of Yerington, Nevada, has another list of attractive mineral specimens. Look it over!

Another new advertiser is Mrs. A. O. Phipps, of Dallas, Texas, who has some fine crystals and opalized wood for sale.

Want any gems cut or minerals polished? Topaz Gem Co., of Salt Lake City, Utah, will do this for you. See their ad!

W. Scott Lewis, of Hollywood, California, has issued an 11 page, 1946, catalog of inexpensive student specimens. Send 5c for a copy. We know you will be pleased with it.

The Western Mineral Exchange, of Seattle, Washington, is featuring saws, arbors, cutting material,. and fluorescent minerals in its six ads.

Allan Branham, of Lander, Wyoming, who speciallizes in jade, features a number of varieties — also a number of agates and other cutting material.

Fluorescent hyalite on aplite from South California! Thompson's Studio, of Pomona, California, has it.

De Marrionne and Charles, of Los Angeles, California, are featuring some attractive cut stones.

Still another new advertiser is the Gemological Institute of America who offer some interesting publications on gems and gemology.

Northern Ohio Guild

A regular meeting of the Guild was held on September 11, 1945, at Western Reserve University, Cleveland, Ohio. Dr. Henry F. Donner, of the University, was the speaker whose subject was "Science of color."